

WHAT IS CLAIMED IS:

1. A memory device for communicating with an integrated circuit via a communication bus, said device comprising:
 - an interface circuit for receiving communication signals from the communication bus, and for decoding the communication signals, and for generating a plurality of protocol signals and for outputting one of the plurality of protocol signals in response to a select signal;
 - a user selectable non-volatile memory for storing user selected protocol and for generating the select signal, corresponding to the user selected protocol;
 - a non-volatile memory; and
 - a controller for controlling the non-volatile memory; said controller responsive to said one protocol signal.
2. The memory device of claim 1 wherein the interface circuit comprises:
 - a decoding circuit for receiving the communication signals and for decoding the communication signals to generate a plurality of protocol signals;
 - a multiplexer for receiving the plurality of protocol signals and for generating one of the plurality of protocol signals in response to a select signal.
3. The memory device of claim 2 wherein the plurality of protocol signals represent protocol for LPC communication, FWH communication.
4. The memory device of claim 1 wherein the user selectable non-volatile memory comprises a non-volatile fuse.
5. The memory device of claim 4 further comprising:
 - a programming logic circuit for receiving the user selected protocol to program the non-volatile fuse.
6. The memory device of claim 5 further comprising:
 - said non-volatile fuse has an output;

a fuse sense circuit for receiving the output and for generating a fuse control signal; a latch for receiving the fuse control circuit and for generating the select signal.

7. The memory device of claim 6 further comprising:

a mode selecting-circuit responsive to a test signal for testing the memory device or for operating the memory device.

8. A memory device for communicating with an integrated circuit via a communication bus, said device comprising:

an interface circuit for receiving communication signals from the communication bus, and for decoding the communication signals, and for generating a plurality of protocol signals, and for outputting one of the plurality of protocol signals in response to a select signal;

a non-volatile fuse for generating the select signal;

a non-volatile memory;

a controller for controlling the non-volatile memory; said controller responsive to said one protocol signal; and

a sensing circuit for detecting the communication signals and for programming the non-volatile fuse.

9. The memory device of claim 8 wherein the interface circuit comprises:

a decoding circuit for receiving the communication signals and for decoding the communication signals to generate a plurality of protocol signals;

a multiplexer for receiving the plurality of protocol signals and for generating one of the plurality of protocol signals in response to a select signal.

10. The memory device of claim 9 wherein the plurality of protocol signals represent protocol for LPC communication, FWH communication.